SHINGTON

DEPARTMENT OF PUBLIC UTILITIES A. J. Benedetti, Director

November 16, 1977

Mr. Ralph W. Larson, Director Department of Game 600 North Capitol Way Olympia, Washington 98504

Mr. Gordon Sandison, Director Department of Fisheries 115 General Administration Building Olympia, Washington 98504

#### Gentlemen:

We have completed our review of documents forwarded with Department of Game letter dated November 3, 1977, and joint Department of Game/Department of Fisheries letter dated October 3 (Nov. 3), 1977. Both documents, the letter of understanding to the Federal Power Commission and the FLOW REGULATION SCHEDULE FOR MAYFIELD POWER PLANT, are satisfactory and signed copies are attached for your joint signatures and transmittal to the Federal Power Commission. After you have signed, please return copies of the fully executed documents for our files.

The City of Tacoma again wishes to express appreciation to the management and staff of the Departments of Game and Fisheries for working with the City to achieve agreement on this complex and important issue. One valuable by-product of our discussions during these negotiations is that all parties now have a better understanding of the others' concerns. This can't help but provide a continuing positive benefit to both fishery and power interests on the Cowlitz River.

Very truly yours,

Director of Utilities

Attach's.

# DEPARTMENT OF GAME 800 North Capital Way Olympia, Washington 98704

206 753 5300

November 3, 1977

Mr. Kenneth F. Plumb, Secretary Federal Power Commission 825 North Capitol Street Washington, D.C. 20426

Dear Mr. Plumb:

REFERENCE: FPC PROJECT NO. 2016

COWLITZ RIVER, WASHINGTON

In September 1975, the City of Tacoma, Department of Public Utilities filed with the Commission an amendment to their license for Cowlitz River Power Development, Project No. 2016, Cowlitz River, Washington. The City requested license modification for installation of a fourth generator in the Mayfield Powerhouse and would like to begin installation as soon as possible, avoiding delays which would be caused by lengthy hearings. This letter of understanding sets forth conditions that will permit installation of the fourth unit to proceed without further delay. It is mutually understood by City of Tacoma and the Department of Game that project operations may have to be modified if studies and/or actual operation conclusively show significant losses to steelhead fishing opportunity.

Washington Game Department is concerned that operation of this project will adversely impact the steelhead fishery. The proposed flow regime for this project shows an increase in the number of days where flows will be above maximum three-unit operation of 10,800 cfs. Game is concerned these flows will make fishing difficult, reducing catch and fishing effort. Present knowledge indicates to the Department of Game that modification of project operations is the only means of mitigating any possible losses, however, Game will consider other mitigative measures if reasonable means are developed in the future.

Studies are needed to measure the effects of the proposed flow regime on steelhead fishing. The City of Tacoma and Washington Game Department discussed this situation and have agreed installation of the fourth unit can commence at this time. Tacoma will fund a cooperative study with the Game Department, starting in the fall of 1977. Studies will continue for three years pre-project and two years post project, or until Tacoma and Game agree sufficient data are available.

These studies will: 1) be as comprehensive as the 1976-77 census, or 2) provide adequate data for statistical analysis to conclusively show impact of the fourth unit.

Downstream of Mayfield Dam, losses of salmonid eggs and fry have occurred as a result of redd desiccation and stranding. The negotiated flow agreement between the City of Tacoma and Department of Game and Fisheries (attached), should help resolve stranding and desiccation problems. A study funded by the City of Tacoma, will be conducted to evaluate effects of both three and four unit operations on steelhead stranding and redd desiccation. This study will insure the flow agreement adequately protects the steelhead resource.

In order to ease implementation of the flow agreement schedule the City of Tacoma and Department of Game agree that portions of Article 34 pertaining to timing of evacuation of Swofford Pond can be modified to read as follows:

"...at or below elevation 765 until May 1 or until Swofford Pond..."

The Corps of Engineers has previously been consulted regarding this proposed change and their letter of concurrence is attached.

If cooperative studies establish that modification of project operations are necessary, these changes can be accomplished through existing License Article 37.

This letter of understanding addresses all presently known fishery concerns determined during review of Tacoma's application for a fourth unit.

ACCEPTED:	
DEPARTMENT OF GAME	
Ralph W. Larson, Director	Date 72n' 73, 1577
DEPARTMENT OF FISHERIES	
Gordon Sandison, Director	Date
By CITY OF FACOPA	Date November 16, 1977
A.J. Benedetti, Director Department of Public Utilities	

#### FLOW REGULATION SCHEDULE FOR MAYFIELD POWER PLANT

### A. March 1 - July 15

March 1 or later forecasts indicate that this flow cannot be achieved and meet reservoir refill requirements. If the forecasts indicate that 5,000 cfs cannot be achieved, every concerted effort will be made to maintain as high and as constant a release as possible. Date of commencement to be March 1, dependent upon observations or predictions of the emergence of salmonid fry made by the Departments of Game and Fisheries.

## B. July 16 - September 15

Minimum flow releases from Mayfield Dam to be 2,000 cfs during this period. The 2,000 cfs is to be a constant flow. If circumstances beyond the control of the City of Tacoma require the release of greater amounts of water, then reductions in rate of flow shall be equal to or less than the rate of change of natural flow into Mayfield Reservoir.

# C. September 16 - November 20

Every concerted effort will be made to maintain a flow regime between 2,500 and 4,000 cfs at Mayfield Dam. Should circumstances beyond Tacoma's control make it necessary to exceed the 4,000 cfs flow level, then, if possible, subsequent discharges will be provided to adequately cover existing salmon redds. Spawning flows will apply through November 20 or until completion of spawning, whichever comes first. The Washington Department of Fisheries will make spawning surveys each season and notify the City upon completion of spawning.

D. November 21 - February 28

Minimum flow releases from Mayfield Dam will be maintained at a level that will inundate existing redds except when conditions are beyond the licensee's control

The flows and dates set forth above are the best available and are established with the understanding they can be modified by mutual agreement based on ongoing observations and studies. Good communication between all parties is essential to provide maximum operating flexibility and maximum benefit to the fishery resource of the Cowlitz River.

ACCEPTED:	was widel.
DEPARTMENT OF GAME:	
Ralph W. Larson, Director	DATE 100 23,1577
DEPARTMENT OF FISHERIES:	
Gordon Sandison, Director	DATE
BY CITY OF TACOPA:	
A.J. Benedetti, Director Department of Public Utilities	DATE November 16, 1977